



Paris Fire Department
Bureau of Fire Prevention
135 S.E. 1st Paris, Texas 75460
Telephone: 903-784-9226 Fax: 903-785-8519



FIRE PROTECTION GUIDELINES

Mission Statement and Intent:

The Paris Fire Department *Bureau of Fire Prevention* (BFP) is committed to the process of improving fire prevention, protection, and safety for the City of Paris and in assisting the public, not only in better understanding the overall process, but with compliance as well. These guidelines are intended to be used as a simple “**check list**” to help expedite the overall code enforcement process and do not replace any codes and/or ordinances adopted by the City of Paris or any specific requirements as mandated by the Fire Chief or Fire Marshal. Note: *Reference information is provided in brackets []*.

Adopted Codes:

2015 Edition of the International Fire Code

2015 Edition of the International Building Code

2015 Edition of the International Residential Code

2015 International Existing Building Code

2014 Edition of the National Electrical Code, NFPA 70

Amendments as per City Ordinance No. 2017-025, 2017-026, 2017-027

New Building Construction (Site Plans Submittal & Review and Inspections):

1. A pre-construction meeting with the Fire Marshal may be required prior to plan submittal.
2. Site plans will be drawn to a common scale and include all pertinent information related to the entire project: i.e., type of construction/occupancy class/ designed occupant load, total building area sq. ft. building height and location, roadways, fire lanes, topography, water service lines, sewer, drainage, utilities, exits and means of egress lighting and exit sign illumination, special hazards, et al.
3. An **egress plan** or **life safety plan** may be required to indicate the required exits, path of travel distance to the exit, and floor fixtures.
4. Type, size, and location of all storage tanks.
5. Building address (using at least 6” numbers) must be legible from the primary street side and/or fire lane.
 - A. Gas and electric meters and/or their disconnect devices must also be identified by address.
6. Approved Locking Fire Department Connection (FDC) caps shall be installed.
7. Knox Box entry system is required with location pre-approved by the Fire Marshal.
8. The following list details more specific requirements: Fire Apparatus Access Road[Defined IFC-Ch 2]:

A road that provides fire apparatus access from a fire station to a facility, building or portion thereof. This is a general term inclusive of all other terms such as fire lane, public street, private street, parking lot lane, and access roadway.

 - A. Fire lane location and construction details.
 - B. Fire lanes will have no less than 150’ (as a firehose is laid) of unobstructed FD access to all exterior portions of a building.
 - C. Fire lanes must have an unobstructed width of not less than 24’ (except for approved security gates) and an unobstructed vertical clearance of not less than 14’.
 - D. A fire lane easement will either: a) connect both ends to a dedicated street or b) provide an approved turnaround with at least a minimum outer radius of 50’.
 - E. A 24’ fire lane that has (2) or more interconnecting lanes with 90° > turns will have, at a minimum, an interior radius of 20’.
 - F. A 30’ fire lane that has (2) or more interconnecting lanes with 90° > turns will have, at a minimum, an interior radius of 10’.

- G. A dead-end fire lane in excess of 150' in length will have a turnaround at its terminus.
 - a. Size, type, and location of such turnaround will be designed in accordance with IFC-2015 Appendix D, as amended by city ordinance or Fire Marshals approval of comparable alternative.

Fire Protection Systems (Plans Submittal & Review and Inspections):

Plans Submittal:

1. Three (3) sets of plans are to be submitted to the *City of Paris Planning and Development Office* at 150 S.E. 1st Street Paris, Texas 75460.
 - A. The FD will retain (1) set of plans for future reference.
 - B. The job site must retain (1) complete set of approved plans for inspection purposes.
2. All plan submittals for *Fire Protection Systems* must be accompanied by a copy of a *Texas Department of Insurance License* (which is stamped and signed by a licensed Fire Protection Contractor and/or a copy of contractor's *Texas Fire Sprinkler Underground* license or *General license* and include:
 - A. Project Name and physical address.
 - B. Size and location of all water supplies and/or water lines servicing the building or site.
 - C. Flow test data, shown on the plans.
 - D. Size, type, and location of all piping and valves.
 - E. Location and size of all thrust blocks.
 - F. Detail of the spigot and/or in-building riser turn.
 - G. Vault configuration and appurtenances (when in-ground vault is required).
 - a. An in-ground vault is required when total length of Fire Sprinkler Underground Main exceeds 50'.
 - b. Vault to include main control valve, backflow prevention device, and in some applications and as directed by the Fire Marshal, the FDC.
 - c. A backflow prevention device may be installed in the Riser room for a Fire Sprinkler Underground Main length of 50' or less.
 - H. Location and type of FDC.
 - K. Location and type of backflow prevention.
 - L. All installations and/or operations must correspond with the approved plans.
 - M. Submittals that do not conform to the minimum above requirements will not be approved.

Plans Review and Inspections:

1. Plans (as well as installation) must comply with the requirements of *NFPA Standards* and the codes listed in the "**Adopted Codes**" section at the beginning of this document and a fee will be assessed.
 - A. ***FEE SCHEDULE*** included at the end of this document.
2. Construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal and/or demolition of any building or structure or the appurtenances thereof, connected or attached to such buildings or structures, will comply with the requirements of those codes listed in the "**Adopted Codes**" section at the beginning of this document and such work will be restricted until all plans receive the final approval by the PFD *Bureau of Fire Prevention*.
3. Contractors are responsible for ensuring systems being installed/serviced comply with all Federal, State and/or local codes and/or ordinances.
4. The following list details more specific requirements: **Fire Sprinklers** [*IFC-Chapter 9*]:
 - A. Plans require an approved third-party review by a licensed Fire Protection Engineer or Professional Engineer when the installation or relocation of sprinkler heads exceeds (10) heads.
 - B. Sprinkler system riser room-access door must be labeled as the "Fire Sprinkler Riser Room."
 - C. All riser rooms will have a hard-surface entrance and be large enough to accommodate maintenance and testing activities (dimensions to be no smaller than 6' x 6').

- D. An approved, weatherproof, audible/visual device shall be provided on the exterior of the building in an approved location above the FDC.
- E. Access to the FDC will include a 10' clear path of travel and have all weather access (concrete or asphalt).
- F. The FDC shall be installed between 36"-48" above grade.
- G. Inspector test connections, drains, and ball-drips shall be piped directly to the exterior.
- H. Riser rooms will have permanent lighting and heat (heating appliance will be hard-wired to the building electrical distribution system and maintain a minimum of 40°).
- I. Dry-system air compressors shall be hard wired.
- J. The FDC will be clear and unobstructed.

Fire Alarms [IFC-Chapter 9]:

- A. A copy of the *Texas Fire Alarm Planners License* of the person who prepared the drawings and a copy of the *Fire Alarm Technician License* of the person who performed the work.
- B. Provide (3) sets of plans, (1) set will be kept by the fire marshal for reference.
 - a. Installer must keep set of approved plans on job site during installation and for inspection.
- C. All drawings are required to have a stamped seal by either a *Texas Fire Alarm Planner* or a *Texas Licensed Engineer*.
- D. A floor plan which indicates the use of all rooms and provides details of ceiling height.
- E. Locations of alarm-initiating and notification appliances.
- F. All new fire alarm systems will have digital communications dialers with point identification reporting to the monitoring company.
 - a. When an existing fire alarm system dialer is upgraded, such will comply with this standard.
- F. Alarm control and trouble signaling equipment including (but may not be limited to):
 - a. Annunciation.
 - b. Power connection.
 - c. Battery calculations.
 - d. Conductor type and sizes.
 - e. Voltage-drop calculations.
 - f. Manufacturer, model numbers, and listing information for equipment, devices and materials.
 - g. The Interface for any Fire Safety Control functions.
 - h. Connections to any sprinkler, mechanical, and/or vent-a-hood systems.
 - i. DB levels of audible alarms.
 - j. Candela rating of strobes used.
 - k. Mounting heights of all devices.
 - l. Sequence of operation for all devices as per NFPA 72.
- G. Instructions describing the installation, operation, testing, and proper maintenance of the equipment.
- H. Information to aid in establishing an emergency evacuation plan for the protected area or premises as per *state fire alarm rules* (on state website).
- I. Information aiding in the prevention/reduction of false alarms as per *state fire alarm rules* (on state website).
- J. An approved third-party plans review is required by a licensed Fire Protection Engineer or Professional Engineer when the installation or relocation of devices exceeds (10) devices.
- J. Plans will be reviewed in accordance to the requirements of NFPA 72 and the codes listed in the "**Adopted Codes**" section at the beginning of this document.
- K. Inspections will be requested by contacting the Fire Marshal for scheduling.
 - a. Component test required for at least the following: audibility, strobe candela output, Class-A loop, etc.

- b. A *Fire Alarm Technician (FAL)* and/or a *Residential Fire Alarm Superintendent (RAS)* must be on-site.
- c. All initiating and notification devices, battery size, tamper alarms, and system monitoring will be inspected.
- d. Rough Wiring inspection is required.

Fire Hydrants [*IFC-Section 507 and Amendments as per City Ordinance No. 2017-025*]:

- A. Location, type, and construction details for all **existing** and **proposed** fire hydrants and their associated control valves.
- B. Fire hydrants will be strategically located in accordance with the following:
 - a. Within 400' of a buildings without an approved Automatic Fire Sprinkler System.
 - b. Within 100' of the Fire Department Connection (FDC) in a building with an Automatic Fire Sprinkler System.
 - c. A fire hydrant will be situated from 2'-6' from the curb or fire lane and may not be located around the perimeter of a cul-de-sac.
- C. Inspected as a part of the other fire protection components.

Fire Sprinkler Underground Main [*IFC-Section 507*]:

- A. Plans will conform to the *GENERAL NOTES* found in the *BACKFILL AND TRENCH WIDTH UNDERGROUND FIRE MAIN* Instruction document (June 2009). Copy available at the City of Paris Engineering Office.
- B. Type, size, and location of the dedicated Fire Sprinkler Underground Main (constructed in compliance with *NFPA 24*, *NFPA 13*, and State and local codes) and, where applicable, a vault and all appurtenances (i.e., **backflow prevention device**, etc).
 - a. An in-ground vault is required when total length of Fire Sprinkler Underground Main exceeds 50'.
 - b. Vault to include main control valve, backflow prevention device, and in some applications and as directed by the Fire Marshal, the FDC.
 - c. A backflow prevention device may be installed in the Riser room for a Fire Sprinkler Underground Main length of 50' or less.
- C. A Fire Sprinkler Underground Main will begin at the point of connection with an underground circulating public/private water main (a flow valve is required at this junction to isolate UFM from the public/private water distribution line).
 - a. Backflow prevention is required.
- D. A Fire Sprinkler Underground Main will terminate inside a building at the top of the spigot and extend no more than 3' above the floor.
- E. Detail of the spigot and/or in-building riser turn.
- F. All ductile iron retaining rods and other non-plastic components shall be externally coated for corrosion by approved means.
- G. A copy of the Fire Sprinkler Underground Main certificate and flush report will be sealed in a waterproof envelope and permanently attached to the sprinkler riser.
- H. An Inspection is required for each of the following:

Visual:

- a. All piping and thrust blocks must be exposed with pipe labeling visible and legible from grade.
- b. Installation contractor or legal representative must be present during inspection.

Hydrostatic Test:

- a. A new Fire Sprinkler Underground Main will be hydrostatically tested in accordance to NFPA standards.

- b. All piping and thrust blocks must be exposed with pipe labeling visible and legible from grade. Center loading allowed with the approval of Fire Marshal, or inspector.
- c. Any pressure loss (leaks) will result in a failed inspection.
- d. Installation contractor or legal representative must be present during inspection.

Flush:

- a. Flushing process will be in accordance to NFPA standards.
- b. All piping will be thoroughly flushed **prior to** connecting to the system riser(s).
- c. Installation contractor (RME) must be present during inspection.

Final:

- a. A final field inspection(s) may be required prior to approval of overall project.

Certificate of Occupancy Inspection Requirements:

Prior to the issuance of a *Certificate of Occupancy*, a building or structure must be free of fire related hazards and/or conditions, be compliant with all codes/standards/City Ordinances, and successfully pass an inspection. Listed below are the most common code violations (list is not all-inclusive) found by inspectors. Please use the list as a guide to ensure compliance:

Exterior Features:

1. All fire lanes with correct painting will be completed and in working order.
2. All fire lanes and access roads are clear and unobstructed.
3. Fire hydrants shall be completed and in working order prior to construction.
4. No accumulation of waste material.
5. Fire Department Connection (FDC) unobstructed with Knox locking caps.
6. Address on front and rear exits shall be legible from the street and fire lane.
7. Address listing on electric and gas meters and/or disconnecting means.
8. Knox Box located at the main entrance, or riser room door. And/or as directed by the Fire Marshal.
9. Knox Box required having proper keys placed inside. Keys to Sprinkler Riser Room, Front Door, Alarm Panels, Elevator recall, and any other locks necessary to control fire, damage loss, or for emergency response.

General:

1. There can be no storage in any building within 24" of the ceiling.
2. Buildings with sprinkler systems must have at least 18" of clearance below sprinkler heads.
2. Sprinkler heads free of paint/overspray.
3. Ceiling panels in place.
4. The area in front of an electrical panel must have a clear space of at least 36".
5. Empty breaker slots in electrical panels must be covered with proper blank covers.
6. Occupancy-load must be clearly posted.
7. Fire-rated assemblies must be properly constructed with any penetration sealed.
8. Extension cords/multi-adapters are for **temporary use only**, with such use in compliance with codes.
9. Abatement of electrical hazards.
10. Mechanical/electrical/boiler rooms free from storage and combustibles.
11. Boilers must be inspected every (2) years and have current inspection posted.
12. Flammable/combustible liquids stored in proper location/container.
13. Electrical receptacles must have cover plates installed.
14. All fire-rated assemblies and fire doors must be intact and operational.

Exits:

1. Accessible means of egress.
2. Exits must not be blocked and must be kept unlocked during building use.
 - A. Lockable exit doors must be un-lockable from the inside without the use of a key, tool, or any special knowledge/effort or provided with approved panic hardware.
3. Exit lighting and emergency lighting must be operational.

Fire Protection Equipment:

1. Portable fire extinguishers must be annually serviced/tagged by a licensed company.
2. At least one *2A-10BC fire extinguisher* is required per each 3000 sq. ft of a building.
 - A. An extinguisher must be within 75' travel distance from any point within the building.
3. Sprinkler system must be annually serviced/tagged (in-service/operational) by a licensed company.
4. Fire alarm system must be semiannually inspected/serviced/tagged (in-service/operational) by a licensed company.
5. Kitchen hood systems and spray booth systems must be semiannually inspected/serviced/tagged (in-service/operational) by a licensed company.
6. A portable *Type K extinguisher* with proper signage is required with each *Type I hood* system.
7. Rooms dedicated for housing fire protection equipment must be properly labeled and accessible.

Approved third-party plans review list:

1. **Emily Kalina, P.E.**
Traditions Fire Consulting LLC
P. O. Box 5587
Frisco, TX 75035
(972) 979-0631
www.traditionsfire.com
2. **Albert W. Reed P.E.**
Reed Fire Protection Engineering
4144 N. Central Expressway Suite 510
Dallas, TX 75204
Off. Ph: 214-638-7599
Toll Free: 1-800-381-5504
3. **Jay Loucks, P.E.**
GreenTag Engineering, LLC.
4221 Wilson Lane
Carrollton, TX 75010
OFF. PH: 682-214-GTAG {4824}
jay@getagreentag.com
4. **Ronald B. Coker, P.E.**
Coker Engineering LLC
Life Safety & Fire Protection Engineering
1540 Keller Pkwy. Ste 108 #319
Keller, Texas 76248-3685
Off Ph:817-742-2409
Fax:817-742-0047
Cell:817-739-8333
5. **Bob D. Morgan, P.E, CPCU**
Fire Protection Engineering Consulting
5217 Copper Creek
Keller, TX 76248
Off Ph: 817-741-4777
bobdmorgan@verizon.net
6. **Steven McCawley, P.E.**
Hughes Associates
200 Chisholm Place - Suite 230
Plano, TX 75075
P 972.491.1900 | M 301.639.7987
smccawley@haifire.com | www.haifire.com
7. **Mark Hasenmyer, P.E.**
MEH Fire Protection Engineering LLC
1311 River Oaks Drive
Flower Mound, TX 75028
Off Ph: 972-874-2662
Fax: 972-874-5591

FEE SCHEDULE:

Required Fire Plans Review Fees

Underground Fire Main Plan

\$50.00 plans review fee per fire main.

A plan shall be submitted to the City of Paris for review on the installation and modification of all underground fire mains.

Above Ground Fire Systems

A \$75.00 minimum or \$.50 per fire sprinkler head whichever is greater with a maximum of \$500.00 for plans review. The fee will be calculated according to the amount of sprinkler heads shown on plans. An additional approved third party plans review is required when the installation or relocation of sprinkler heads exceeds twenty (10) heads. An approved list of third party fire protection engineers will be provided upon request.

Fire Alarm Systems

A \$75.00 minimum or \$.50 per fire alarm device whichever is greater with a maximum of \$500.00 for plans review. The fee will be calculated according to the amount of devices shown on plans. An additional approved third party plans review is required when the installation or relocation of devices exceeds ten (10) devices. An approved list of third party fire protection engineers will be provided upon request.

Required Fire Construction Permit Fees

Underground Fire Main

\$50.00 permit fee. A construction permit shall be required for the installation or modification of any underground fire main.

Above Ground Fire Sprinkler Systems

\$75.00 Minimum or \$.50 per fire sprinkler head whichever is greater with a maximum of \$500.00 permit fee. The fee will be calculated according to the amount of sprinkler heads shown on approved plans.

Fire Alarm Systems

\$75.00 Minimum or \$.50 per fire alarm device whichever is greater with a maximum of \$500.00 permit fee. The fee will be calculated according to the amount of devices shown on approved plans.

Fixed Fire Extinguishing System

A \$50.00 permit fee is required for the installation or relocation of each fixed fire extinguishing system.

Flammable and Combustible Liquids

1. A construction permit is required to install or remove any above or below ground flammable or combustible liquid tank(s); a fee of \$100.00 per tank will be accessed.

LP-Gas – A \$50.00 construction permit is required for the installation of or modification to an LP-Gas System.

Spraying or Dipping - A \$100.00 construction permit is required to install or modify a spray room, dip tank or booth.

Standpipe systems – A \$100.00, construction permit is required to install a standpipe system. The permit fee will be waived if the standpipe system is a part of an automatic sprinkler system.